This document is a best practices essay from the international, multidisciplinary collection of teaching and training techniques, “Critical thinking and Clinical Reasoning in the Health Sciences.” Each essay in this set provides an example of training reasoning skills and thinking mindset described by international experts in training clinical reasoning.

From “What” to “Why” – Reflective Storytelling as Context for Critical Thinking

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Dr. Gross Forneris’ [right] has been examining the relationship between context-based analysis of clinical cases and improved critical thinking in practice. Her clinical expertise is in rehabilitation, case management and leadership. When she trains clinical reasoning in the classroom and clinic, she always focuses on developing skill in meta-cognition. Thinking about and evaluating one’s thinking guards patients from error and protects clinicians in the workplace.

Professor Susan Ellen [Suellen] [left] Campbell’s clinical expertise is medical-surgical nursing. She coordinates post baccalaureate education at the College of St. Catherine. Together, these colleagues use what they term a “thinking nursing” approach based on the theoretical framework proposed by Carper (1978) in her papers on patterns of knowing. Their class exercises strive to include the practice of critical thinking skills to enhance connections between classroom learning and practice.
Class session and students:
Drawing from the nursing education literature on narrative pedagogy (Diekelmann, Ironside & Harlow, 2003; Ironside, 2003) and critical dialogue (Brookfield, 1990, 1995, 2000; Myrick & Yonge, 2004; Myrick, 2002), this class session is part of an introductory baccalaureate nursing assessment course where students are beginning to learn how to assess a clinical case. In this course, stories are integrated into the teaching approach in an effort to begin developing a foundation for students to think within the context of nursing practice. Because we believe that this pedagogical approach is very effective for building critical thinking skills, we introduce this story approach early in the course. The class session we outline here would fit well in any clinical course with health science students involved in beginning clinical experiences.

Creating context assists students’ abilities to share their thoughts and feelings about clinical practice experiences and to reflect and make meaningful learning connections. We want them to practice using critical thinking in the context of these stories and make meaningful learning connections. We believe that their successful learning will motivate them to transfer these cognitive behaviors to actual practice. These exercises will facilitate their development to critically think in practice.

The goal of the class session
Our goal in this course is to facilitate students’ ability to be critically reflective and connect the abstract ideas of nursing theory and the unique context of practice. The use of personal stories as a method to enhance students’ ability to be critically reflective is derived from the philosophical and theoretical notions of narrative or story. Some of the classic work on narratives was done by Labov (1962). He demonstrated how stories were often told for the purpose of communicating about important dilemmas and problem situations. As a result of telling the story, the storyteller’s perspective on a key dilemma and how the storyteller views the resolution of the problem situation is readily apparent. In this case, everything that the storyteller includes in the story provides insight into what the storyteller wants to communicate about the actual experience being captured in the story (Labov, 1962; Reismann, 1993).

We want students to use these aspects of storytelling to better understand their experiences and actions therefore through the use of story, students engage in an active learning process whereby they actively read and reflect on their stories. At the same time the professor is offered a window into the student’s understanding of the clinical incident. Through reflection, we focus on the context of the story and, through the use of guiding questions, students begin to understand any implicit meanings. This helps them to intentionally connect their classroom learning with real-life practice. Stories are shared between students in a small seminar class. Our role as faculty is to guide a critically reflective dialogue within the small student discussion group. Stories provide the mechanism for understanding as they can be reflected on, reanalyzed and understood.

In addition to guiding students to use their critical thinking skills in a clinical story context, we also want them to begin to understand something about their thinking process. So we talk with them a bit about critical thinking and problem-solving, and help them make connections between these terms. In this way they begin to more closely focus on their own thinking processes. Our learning objective reflects both of these considerations.

Learning objectives
Following presentation, discussion and assigned learning activities, the students will be able to:

1. Use elements of storytelling to help them analyze and learn from their clinical practice experiences.
2. Improve critical thinking skills (analysis, inference, explanation and evaluate) through stories that they tell about their clinical practice experiences.
3. Analyze and discuss the knowledge that they have gained from actual clinical experiences
4. Discuss the characteristics, skills, and attitudes of the critical thinker, and relationship between the concepts: nursing process, critical thinking, problem-solving and decision-making.

Students’ preparation for this reflective seminar

This exercise has as its aim the integration of knowledge gained in the classroom, the practice of critical thinking skills and the development of skill in clinical reasoning. Initially the students use prepared cases to achieve these learning outcomes. As the course moves along and as students have more opportunity for clinical work, we ask students to journal about an important clinical experience and to submit their stories prior to the seminar day. Figure 1 below is a sample of the assignment guideline that we give to students to help them select, write about, and submit a clinical story. Following the reflective seminar, students then create a written reflection about the learning connections and new insights into their story as a result of sharing and discussing their story with peers and the instructor.

Guidelines for Storytelling as Reflective Journaling

1. Recall a clinical experience that resulted in a feeling of accomplishment, satisfaction, and/or resulted in feelings of discouragement or frustration. Write about this experience in the form of a story with a beginning, middle and end. To help you provide context for your story, think about the questions “Who?” “What?” “When?” and “Where?” as you write the story.

2. Following your post-clinical seminar, critically reflect on your story and the discussion about your story with your seminar group. Prepare a written reflection of your clinical story per the guidelines below:
   - Why did you pick your story?
   - Discuss the learning connections you made that helped bring what you read and discussed in the classroom more practical and real in the clinical setting.
   - How do you think this story will impact your nursing practice?

Figure 1: An example of the assignment prompt we give students for this session

Our preparation before class for this assignment

In the early weeks of the course, students have had very few clinical experiences prior to and in the first two months of the course. Through student participation in the critical reflection seminar at the end of the semester, we help students to make connections between what they learned early in the course through the use of case studies in the classroom and lab, to what they experienced during their clinical experiences.

We review the stories that the students have submitted for the reflective seminar, and prepare for the guided reflective dialogue that will occur in the seminar by analyzing the stories for their possible meanings. Each instructor works individually with approximately 24 students divided into 3 small groups. It has been our experience that faculty can become overwhelmed with the amount of time guided reflective dialogue takes in order to make learning meaningful. Preparing for the seminar in advance by reviewing the stories helps us to keep the reflective dialogue from moving into a “feedback” session.
Critical conversations help students to move from *telling what they know* to *why they know*. Engaging learners in a critical dialogue also emphasizes the use of questions that fairly and respectfully challenge information. This type of question helps students to ignore unnecessary and irrelevant information and determine the aspects of the care situation that are significant. They assist students to reconstruct a situation, defend an action, hypothesize an expected consequence, identify values, and judge the appropriateness of an action.

**Faculty Guided Questions for Reflective Seminar:**

- How did this make you feel? How did the patient make you feel?
- How did the patient feel about it? How do you know how the patient felt about it? (Analysis and evidence based Inference)
- What are the significant background details that contributed to this experience? (Analysis and Inference)
- How did these details influence your thinking?
- What sources of knowledge influenced/should have influenced your thinking? (Interpretation and Explanation)
- How have past experiences helped you to make sense out of the current situation?
- Do you think your feelings clouded the issue? Explain why or why not? (Analysis and Explanation)
- Describe what you were thinking about, as you were involved in the experience.
- What personal values or beliefs influenced your perspectives in this situation?
- What may have been taken for granted? (Analysis and preliminary Inference).
- What assumptions were made? (Analysis and Inference)
- What rationale was used to justify the assumptions? (Interpretation and Explanation)
- Were the assumptions correct? How do you know? (Evaluation)
- What things stand out for you as you reflect on this experience?
- What aspects of context impacted you and will help you to remember this experience? (Analysis, Inference, and Explanation)
- What were the consequences of your action? How could you have better dealt with the experience? What other choices did you have? (Analysis, Inference, Explanation, Evaluation)
- How has this had an impact on you? How will this experience impact your future practice? (Inference and Explanation)

**Figure 2: Guideline questions for the reflective seminar**

To assist with the process, as part of the seminar preparation, we provide our faculty a series of guided questions that they can use to enhance their dialogue skills with students. This prepared question list also helps faculty with conversations they have with students during the semester surrounding case studies or guiding students with reflective journaling. In Figure 2 we have included a question guideline that will be a good start for leading a reflective seminar. We use these questions as a general guideline ourselves, With experience teaching guided reflective seminars, you can expect to become comfortable in modifying the questions to closely fit the individual session as well as to plan when each questions is introduced.

Helping students to think critically about their clinical stories calls on faculty to use their own critical thinking skills well. One needs to interpret and analyze the student’s story and draw accurate and meaningful inferences as to the probable meanings in the story in order to ask useful guided questions of the student. In time instructors become more adept at using their critical thinking skills in this way. Dialogue should be a critical conversation with students, guiding students thinking. In Figure 2 we have identified the critical thinking skills called into play when one of the guiding questions is asked, and so we can feel confident that we are practicing students in critical thinking when we ask these questions. Before beginning the seminar week, we make sure that we have secured the necessary time for the seminar, as guided reflection takes time!
Teaching the lesson
The reflective seminar is conducted at the end of the semester after the students’ first clinical experience. Students' examine their experiences in the clinical setting using their critical thinking skills, connecting the theory they learned in the classroom to actual clinical practice. They meet in small seminar groups, each group taking place over a 3-hour period of time.

As the students begin to engage in their own clinical experiences, guided reflection becomes a more personal learning activity. Student’s prepare for this activity by reflecting on their own clinical experiences and turn them into stories. Stories of their clinical experiences are then shared and discussed during the post clinical seminar. Using guided questions, like those outlined in Figure 2, faculty guide the students in a reflective dialogue to reinforce the learning connections the students are making and reinforce their use of critical thinking skills. Students document their learning insights into their story by creating a post-seminar reflection using the guided questions outlined in Figure 1.

This seminar exercise provides us insight into how best to train each individual student’s clinical judgment skills. We can assess both how they applied clinical knowledge to the case at hand and their strength in using critical thinking skills. Their responses to our seminar questions and their written reflections allowed us to examine what guided their thinking about the clinical case, and to see how they measured their personal learning accomplishments. Figure 3 is a short segment from one students’ reflective journal.

“One aspect of my clinical experience that left me with feelings of accomplishment was that at the end of my time with the patient, she thanked me and said I will be a wonderful nurse… encouraging her to continue her PT at home, increase her activity, and having her explain to me how she was going to manage her medical cares as well as emotional outlets while at home left me feeling like I helped this patient more when she was able to leave the hospital…[I was thinking]… what can I do now that will last when she is at home…The sources of knowledge that influenced my thinking was mainly that I tried to think of what was taught in class on patient education and interventions that would help her current status and help her in the future… I learned how to ask questions and get information in the way of a conversation and also to tell just enough about myself to gain their trust. I truly think this clinical experience has made a positive impact on me…I will keep in mind what I have learned for future practice.”

Feedback from the students
There are several aspects of this exercise that students find helpful for accomplishing their learning objectives. They have told us that the guided reflection gave them an opportunity to focus on their learning through clinical experience, and to think about what guided their nursing actions. The use of stories gave students an opportunity to share how their unique perspectives both aided and challenged their learning. Telling the stories in the seminar provided an opportunity for students to experience a sense of acceptance and support, and “brought nursing to life.” Students indicated that sharing their stories and reflecting on and talking about their thinking and learning was an empowering experience. They also valued the opportunity to be intentional about analyzing their thinking (The practice of Metacognition) and making meaningful and evidence-based connections between their beliefs, prior knowledge and new knowledge. Students began to understand how critical thinking is evidenced in the context of real-life practice.

Final comments on this example of teaching for thinking
While formal evaluation tools are necessary to assess learning (e.g. written care plans and exams), the use of students' stories provides a more personal perspective on their thinking and learning. The use of stories and the guided reflection offers a unique evaluation on the nature of their critical thinking skill, focusing specifically on the critical thinking skills of analysis and inference. While we have not stressed it strongly in this discussion, we also use this exercise to set our expectations for the critical thinking dispositions of open-mindedness and maturity, especially as it relates to clinical nursing practice (Facione and Facione, 2000). The use of stories gives students an opportunity to share their knowledge in unique ways, demonstrating tolerance for diverse points of view, and developing expertise in identifying a sound basis
for making wise clinical decisions. Educators can capitalize on these stories by guiding conversations that help students’ interpret their knowledge and achieve understanding of their actions.

Evaluating our own ability as nurse educators to think critically in the context of practice as we guide novice learners to develop their thinking is integral to the effectiveness of this classroom activity. Providing opportunities for nurse educators to share their own stories of their teaching and mentoring experiences enhances faculty awareness and sensitivity. As well, sharing their students’ stories creates an opportunity to enhance their own knowledge about student thinking and a real awareness of diverse learners.

References


Campbell, S. E. & Filer D. A. How can we continue to provide quality clinical education for increasing numbers of students with decreasing numbers of faculty? In M. Oermann, Annual Review of Nursing Education: Vol. 6. New York: Springer Publishing Company, 2008.


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